METHOD AND APPARATUS FOR PROVIDING VACUUM ISOLATION ABSTRACT OF DISCLOSURE

A gate valve assembly provides vacuum isolation between a first treatment system and a second treatment system. The gate valve assembly includes an actuator rotatably coupled to at least one of the first treatment system and the second treatment system, and configured to operate an actuator assembly that has an actuator arm slidably coupled to the actuator. The actuator arm has a distal end coupled to an isolation gate through a vacuum feed-through, wherein the vacuum feed-through is configured to preserve vacuum with the first treatment system and the second treatment system. The isolation gate is configured to rotate about the gate hinge when the actuator arm is translated, and to close a transfer slot between the first treatment system and the second treatment system, or open the transfer slot between the first treatment system and the second treatment system.